IN THE CLAIMS:

Kindly cancel elected claims 2-5 without prejudice or admission and cancel non-elected claims 6-9 without prejudice or admission and subject to applicants' right to pursue the subject matter thereof in a continuing application.

Kindly amend claim 1 by rewriting it in amended form as follows:

1. (Amended) A vertical MOS transistor comprising:

a semiconductor substrate having a first conductivity type;

an epitaxial growth layer having the first conductivity type formed on the semiconductor substrate;

a body region having a second conductivity type formed on the epitaxial growth layer;

a trench formed through the body region of the second conductivity type so as to reach inside of the epitaxial growth layer of the first conductivity type;

a gate insulating film formed along an upper surface of the body region of the second conductivity type and a wall surface and a bottom surface of the trench;

a polycrystalline silicon gate partially filling the trench so as to be in contact with the gate insulating film and surrounded by the gate insulating film;

a second gate comprised of one of a silicon oxide film and a silicon nitride film filling a remaining portion of the trench not filled by the polycrystalline silicon gate so as to be in contact with the polycrystalline silicon gate and surrounded by the gate insulating film and the polycrystalline silicon gate;

a source region of the first conductivity type formed in the upper surface of the body region of the second conductivity type and around the trench so as to be in contact with the gate insulating film;

a gate electrode connected to the polycrystalline silicon gate and the second gate;

a source electrode connected to the source region; and

a drain electrode connected to the semiconductor substrate.

Kindly add the following new claims 10-20:

10. A vertical MOS transistor comprising: a semiconductor substrate having a first conductivity type; an epitaxial layer having the first conductivity type formed on the semiconductor substrate; a body region having a second conductivity type formed on the epitaxial layer; a trench extending through at least the body region and extending into

the epitaxial layer; a gate insulator formed in the trench; and a gate formed of a first gate material disposed in the trench so as to be surrounded by the gate insulator and a second gate material comprised of an insulating material disposed in the trench so as to be surrounded by the gate insulator and the first gate material.

11. A vertical MOS transistor according to claim 10; wherein the first gate material comprises polycrystalline silicon and the second gate material comprises one of an oxide of silicon oxide and a nitride of silicon.

12. A vertical MOS transistor according to claim 10; wherein the first and second gate materials fill up the trench so that there is substantially no void at a top surface of the gate.

13. A vertical MOS transistor according to claim 10; wherein the gate insulator is formed of silicon oxide.

14. A vertical MOS transistor according to claim 10; wherein the second gate material is in contact with the first gate material.

15. A vertical MOS transistor according to claim 10; further comprising a source region having the first conductivity type formed in an upper surface of the body

region to surround the trench and in contact with the gate insulator.

16. A vertical MOS transistor according to claim 15; further comprising a source electrode connected to the source region.

17. A vertical MOS transistor according to claim 10; further comprising a drain electrode connected to the semiconductor substrate.

18. A vertical MOS transistor according to claim 10; wherein the trench is formed in a U shape.

19. A vertical MOS transistor according to claim 10; further comprising a source electrode connected to the semiconductor substrate.

20. A vertical MOS transistor according to claim 19; further comprising a body electrode connected to the body region and the source electrode.

ADDITIONAL FEES:

No additional fees are believed required; however, should it be determined that a fee is due, authorization is hereby given to charge any such fee to our Deposit Account No. 01-0268.